Backward Design TPACK Lesson Plan Model Development Worksheet

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Lesson Plan Title:
European Exploration

Describe audience, context, constraints:
The primary audience for the European Exploration lesson plan will consist of two fourth grade with 25 students in each class. The students will be learning about the effect that European explorers had on the New World. They will research a European explorer, create a project about the explorer, create a Kahoot account, and then a Kahoot quiz about their explorer. Constraints include time to research, enough computers for all the students, Internet access, knowledge of how to create a Kahoot account and a Kahoot quiz.

Objectives/Indicators
Ohio Content Standards
Theme: Ohio in the United States
The fourth-grade year focuses on the early development of Ohio and the United States. Students learn about the history, geography, government and economy of their state and nation. Foundations of U.S. history are laid as students study prehistoric Ohio cultures, early American life, the U.S. Constitution, and the development and growth of Ohio and the United States. Students begin to understand how ideas and events from the past have shaped Ohio and the United States today.

Content Statements
1. The order of significant events in Ohio and the United States can be shown on a timeline.

3. Various groups of people have lived in Ohio over time including prehistoric and historic American Indians, migrating settlers and immigrants. Interactions among these groups have resulted in both cooperation and conflict.

12. People have modified the environment since prehistoric times. There are both positive and negative consequences for modifying the environment in Ohio and the United States.

ISTE-Standards for Students:

1. Creativity and innovation Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
a. Apply existing knowledge to generate new ideas, products, or processes
b. Create original works as a means of personal or group expression
c. Use models and simulations to explore complex systems and issues
d. Identify trends and forecast possibilities

2. Communication and collaboration Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
c. Develop cultural understanding and global awareness by engaging with learners of other cultures
d. Contribute to project teams to produce original works or solve problems

3. Research and information fluency Students apply digital tools to gather, evaluate, and use information.
a. Plan strategies to guide inquiry
b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
d. Process data and report results

ISTE-Standards for Teachers:

1. Facilitate and inspire student learning and creativity Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

a. Promote, support, and model creative and innovative thinking and inventiveness
b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and develop digital age learning experiences and assessments Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards•S.

a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources

d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards, and use resulting data to inform learning and teaching

3. Model digital age work and learning Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
d. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and model digital citizenship and responsibility Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources
c. Promote and model digital etiquette and responsible social interactions related to the use of technology and information
d. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools

Prior Knowledge/Prerequisites
Students need to understand what America was like before the arrival of European explorers and settlers. They need to understand that prior to the arrival of the Europeans, only Native Americans lived in the New World. They should be able to explain why the Europeans needed to find a new sea route to Asia as well as the reasons why the Europeans explored the Americas. They should understand that North America went through a transformation when the explorers and settlers began to arrive and settle. These European explorers and settlers affected the lives of the Native Americans which resulted in cooperation and conflict.

Identify and Discuss Pedagogical Decisions

Pre-Assessment
An informal pre-assessment was done when we discussed Christopher Columbus. Many students had little to no knowledge of him or his significance. This lead to further informal assessments about other explorers. Based on these informal assessments, it was determined that

both classes had little to no knowledge of European Explorers and the affect they had in the Americas.

Formative and Summative Assessments
Formative assessments will be conducted after they complete their research and the completion of their explorer packet. I will use a rubric to check for accuracy on their explorer packet in order to make sure they are producing correct and accurate questions and answers on their Kahoot quiz.

After the students conduct their research, they will create a Kahoot account and create their own Kahoot quiz. They will share their quiz with their classmates. Once shared, the students will play each other Kahoot quizzes. I will also use a rubric to assess their learning for the quiz they created. I will use the Kahoot results of the played Kahoots to determine if students understand the impact that European explorers had.

Why have you chosen these methods?
I have chosen to use Kahoot because students are excited and motivated to use it. They are also a very collaborative and social group so sharing their Kahoot quizzes with their friends and classmates will add extra motivation. I also wanted to my students to use higher order thinking skills where they are using Bloom's New Taxonomy and they are creating and evaluating and not just remembering and understanding. They are moving from learners to leaders by creating their own quiz, sharing it with others, and explaining their explorer to their classmates.

Is technology used for or included in the evaluation process?
Kahoot will generate a spreadsheet with the student's names, their scores, and a question by questions analysis of how they answered. I will use this data to see if the students used the correct information when they created their quiz as well as using the data to see if the students answered the questions correctly.

How will you share data with students/others and why?
This information will be shared to go over any misconceptions the students had about their explorers and the answers they provided.

Models of Instruction/Instructional Strategies
1. Direct instruction - Some of the learning was completed by direct instruction or lecture. The students learned about the reasons for exploration before researching their explorer.

2. Research - The students will learn by researching their explorers on the Internet.

3. Collaborative/Cooperative Learning - The students will work together in small groups to play other students' Kahoot quizzes.

4. Social learning - The students will share their Kahoot quiz with other classmates.

5. Games and Simulations - The students will learn by playing the interactive game called Kahoot.

6. Inquiry Learning - Guided Learning - The students will arrive at an understanding of the explorers themselves. They are responsible for their own learning and their own creation of the Kahoot quiz. They are improving their research skills that can be used throughout their school career.

7. Learner Centered Teaching - Here the student is at the center of learning. The student is responsible for learning about their explorer and created their Kahoot quiz. I am just facilitating the learning.

Procedures/Activities

1. The students began this activity by researching European explorers on the computer. A list of European explorers was given to the students before they started their research. Their first goal was to simply find one of the explorers that they were interested in.

2. Once they chose their explorer, the students used their Chromebooks to conduct their research. They also wrote down notes or used their Google Doc account to type their notes.

3. Next, the students were given a European Explorer packet that they filled out. The packet contained questions about the explorer that the student would use for their Kahoot quiz.

4. Once all the students completed their packet, they set up their under 16 Kahoot account. This type of an account prevents them from posting their content publicly and browse public content created by others.

5. After they created their Kahoot account, the students used the information from their explorer packet to create questions and multiple choice answers for their Kahoot quiz about their explorer. The students created a quiz for other students to take that was 10 questions about their explorer.

6. Next, the students were put into small groups so they could share and play each other's Kahoot quizzes. The student whose quiz is being played would take on the role of the teacher and explain their questions and the answers and educate the other students.

7. Finally, the students will use the information about their explorer to create a class generated timeline. The class will generate a giant timeline that will go out in the hall and each student will have to properly place their explorer in correct place on the timeline.

Identify and Discuss Technological Decisions

Resources
What resources do you need to support the activities?
1. Computers - to conduct research and create their Kahoot account and quiz
2. Internet - to find information about their explorer
3. Textbooks - another resource to use to gather information on their explorer
4. Rubric - to assess the students on their Kahoot quiz

How do the resources help students achieve the objectives?
The resources allow the students to understand what the expected outcome should be. They are aware of the expectations for learning and understand what they need to do to meet the objectives.

Technology Resources
1. Computers - to conduct research, create their Kahoot account and quiz, and play the Kahoots
2. Internet - to find information about their explorer
3. Textbooks - another resource to use to gather information on their explorer
4. Rubric - to assess the students on their Kahoot quiz

These resources were chosen because it fits the types of teaching strategies and methods that are commonly used in my classroom. I will be using a rubric to grade the explorer project and a different rubric to assess the Kahoot quiz. This rubric will help me analyze the types of questions and answers, even the incorrect ones, the students create in Kahoot to check for understanding of the objectives. The data from the Kahoot quizzes that students played will be analyzed to see if they gained any new knowledge about other explorers.